

February 10, 2025

Board of Trustees

Davis Technical College

Office of the Commissioner of Higher Education Program Assessment

Pursuant to Utah Code Annotated 53B-16-102(5)(b)(ii), the following Program Assessment is provided for the proposed **Control Systems and Robotics** program, which the Davis Technical College Board of Trustees will review for approval.

The Office of the Commissioner of Higher Education (OCHE) assesses program proposals to ensure compliance with Utah Board of Higher Education policies and relevant statutory requirements, including alignment with institutional roles and missions, designated service regions, program approval processes, credential definitions, short-term training, and technical education program alignment. This assessment includes a review of the *New Program Proposal* and incorporates peer review feedback into OCHE's analysis and the Commissioner's recommendation.

Program Assessment and Peer Review Feedback

The proposed **Control Systems and Robotics** program aligns with the institutional mission of Davis Technical College to prepare students for employment. The program demonstrates alignment with workforce needs and provides higher education pathways through an articulation agreement with Utah State University. Peer review feedback and OCHE's assessment identified the following considerations:

1. **Program Title and Content:** Peer review feedback from Salt Lake Community College suggested that the program title and curriculum content may benefit from review to avoid duplication concerns and reflect its unique focus. While OCHE does not currently recommend a title change, Davis Technical College may consider a future review of the title and curriculum to ensure continued clarity and distinction.

Commissioner's Recommendation

The **Control Systems and Robotics** program is recommended for Trustee approval.

Next Steps and Trustee Actions

The Board of Trustees will review this proposal and OCHE report to determine whether to approve, defer, or reject the program. If Trustees approve the programs, Davis Technical College must notify OCHE, which will add the program to the Board of Higher Education Consent Calendar.

Please let us know if you have any questions regarding this report.

Sincerely,



Geoffrey Landward
Commissioner of Higher Education
Utah System of Higher Education

CC: President Darin Brush, Chief Instructional Officer Dr. Kelly Simerick

Attachments:

- New Program Proposal
- OCHE Program Assessment and Commissioner's Recommendation, including Peer Review Summary and Feedback



GENERAL REPORT

January 2025 2024

Office of the Commissioner of Higher
Education Program Assessment

New Technical Education Program

Program Title: Control Systems and Robotics

Institution: Davis Technical College

Requested Credential: Technical Certificate (20 Credits/600 Clock Hours)

CIP Code: 47.0303

1. Policy Compliance Overview

Policy R312: Institutional Roles and Missions

The review confirmed that the technical education program complies with the designated role, associated criteria, and alignment with the institution's mission. Specifically, Davis Technical College's role includes offering technical certificates under R312-6.1 and Table 1, aligning with its mission to prepare students for technical occupations.

Policy R315: Designation of Service Regions

The review confirmed that the program will be offered within Davis Technical College's designated service region, ensuring compliance with the policy and alignment with its criteria.

Policy R401: Approval and Modification of Instructional Programs

The review confirmed that the proposal complies with the processes outlined in R401-5.3 for program approval.

Policy R402: Certificate and Degree Award Structures

The review confirmed general compliance with the criteria defining the technical certificate.

Policy R403: Short-Term Training

The review evaluated whether the training should be classified as short-term training intended for experienced workers maintaining or upgrading their skills to meet workforce needs. The program exceeds the criteria for short-term training and appropriately qualifies as a technical certificate.

Policy R404: Technical Education Program Alignment

The review evaluated alignment standards for program structure, foundational and supplemental coursework, distinctiveness, and unique occupational focus. It also assessed whether program materials, including graduation requirements, course descriptions, and objectives, are clearly defined and consistent. The program complies with alignment standards.

2. Workforce and Economic Relevance

The program demonstrates alignment with workforce needs.

- **Market Demand:** The program prepares students for employment as Robotics Technicians (a three-star occupation in Utah, median wage: \$65,640) and provides a pathway to a bachelor's degree and higher-wage positions as a Robotic Engineer (median wage: \$99,930, source: [Jobs.utah.gov](https://jobs.utah.gov)).
- **Partnerships:** The program includes an articulation agreement with Utah State University (USU), enabling students to receive 15 credits toward a bachelor's degree in Technology Systems (Robotics, Automation, and Controls).

3. Duplication of Programs

As part of the assessment, the potential duplication of the programs was reviewed per R312-5.3.1.3, with unnecessary duplication defined under R312-3.14. While institutions are encouraged to avoid duplication, particularly in alignment with designated roles and missions, the Office of the Commissioner of Higher Education (OCHE) is initiating a system-wide evaluation of program duplication. More focused work on this issue is expected in the coming months.

4. Institutional Capacity and Resources

- **Compliance Confirmed:** The program meets institutional capacity standards defined in R401 and R404.
- **Criteria Reviewed:**
 - Facilities, equipment, and faculty are already in place as part of the Automation Technology program. No additional resources are required.
 - Faculty Qualifications: 3 Full-Time Instructors with at least two years of relevant industry experience and 4 Part-Time Instructors.

5. Peer Review Feedback

The program underwent the peer review process coordinated by the OCHE.

- **Salt Lake Community College (SLCC):** SLCC raised concerns about the program title overlapping with its Board-approved Robotics Technology program, potentially causing confusion among employers and stakeholders. In the future, the program committee could consider renaming the program to clarify its distinct focus (i.e., "Controls Systems Technology") with a focus on a review of curriculum content to avoid duplication concerns and reflect its unique emphasis.
- **General Feedback:** Peer reviewers generally supported the program, noting its alignment with workforce needs and articulation pathways.

Conclusion

The Control Systems and Robotics program proposed by Davis Technical College aligns with Utah Board of Higher Education policies R312, R315, R401, R402, R403, and R404. The program addresses workforce needs, provides higher education pathways, and utilizes existing institutional resources.

Recommendation for Approval

The program is recommended for Trustee approval contingent upon:

1. **Supplemental Coursework Definition:** Providing detailed course descriptions and objectives for supplemental courses to ensure compliance with R404 requirements and clarity of program requirements.
2. **Regional Labor Market Data:** Incorporating regional labor market data (MLS) specific to Davis Technical College's service region to strengthen justification for the program's alignment with local workforce needs.

Attachment

Program Proposal (including all supporting documentation)

Prepared by

Kim Ziebarth, Associate Commissioner for Technical Education
Utah System of Higher Education

Utah System of Higher Education

Request for Approval of a New Technical Education Program

Part 1: Notification of Intent

Institution: Davis Technical College

Program Title: Control Systems and Robotics

Program Length: 20 Credits/600 Clock Hours

Anticipated Implementation Date: July 1, 2025

Institutional Role and Mission Alignment: Yes

USHE Aligned Program: Yes

Campus Location(s): Main Campus (260000)

Within Designated Service Region: Yes

Credential Awarded: Technical Certificate

CIP Code: 47.0303

Part 2: Additional Program Information

Financial Aid Eligible: Yes

VA Eligibility: Yes

Delivery Method: Traditional (We will apply for dual approval for Tradition/Hybrid with COE)

Work-Based Activities Included: No

Apprenticeship: No

Programmatic Accrediting or Regulatory Body: No

Opportunities for Industry Licensure or Certification: No

Admission Requirements

Students will complete the 30-credit-hour Automation Technology program before enrolling or have relevant industry experience sufficient for proficiency in the automation field.

Program Eligibility

Secondary and Post-secondary students

Schedule

Open schedule/offered during the day and evening

Comparable Programs

Bridgerland Technical College offers this same program.

Collaboration

We have been offering all these courses as part of our Automation program. Many graduates of that program come back and take these courses as occupational upgrade students. We have collaborated with Bridgerland Technical College automation faculty and USU (see below).

Educational Partnerships

Utah State University offers our students 30 credits if they complete our Automation Technology program and 15 additional credits if they complete the Control Systems and Robotics program. These credits go toward the bachelor's in technology systems in Robotics, Automation, and Controls.

Market Demand/Need

Robotics technician is a three-star job in Utah, making an annual median of \$65,640; however, this certificate leads to a bachelor's degree that allows students to work as Robotic Engineers, which is a five-star job making an annual median income of \$99,930. (jobs.utah.gov)

Area	SOC Code	SOC Title	2024		Numeric Change	Percent Change	Annual Growth	Total Openings Annual (over the Total 10 years)		Education	Work Experience	Job Training	Growth Rate	STAR Rating
			2022 Base Employment	2024 Projection Employment				Openings	Openings					
Logan MSA	49-9041	Industrial Machinery Mechanics	282	406	124	43.97	12	388	38	High school diploma or equivalent	None	Long-term on-the-job training	3.7117	4
Salt Lake City, UT	49-9041	Industrial Machinery Mechanics	1672	2344	672	40.19	67	2216	221	High school diploma or equivalent	None	Long-term on-the-job training	3.4361	4
Ogden-Clearfield MSA	49-9041	Industrial Machinery Mechanics	724	1012	288	39.78	29	955	96	High school diploma or equivalent	None	Long-term on-the-job training	3.4056	4

Wage Potential

See above

Facilities

Program Location and Facility Upgrades

Already in place – no upgrades required

Construction and Relocation Plans

None required

Estimated Costs and Funding Sources

No additional costs

Program Resources

Note: This program does not require any new funding. We are already teaching all these courses in our Automation Technology program. We are now packaging them into a separate certificate.

Faculty

Status	#	Qualifications
Full-Time	3	At least two years of automation and/or robotics industry experience. High school diploma.
Part-Time	4	

Expense Budget

Personnel (Faculty Salary and Benefits)	\$
<i>Full-time Faculty (Salary + Benefits)</i>	\$408,870.00
<i>Part-Time Faculty (Salary + Benefits)</i>	\$72,373.00
Operating Expenses	\$
<i>Equipment [Description]</i>	\$40,000.00
<i>Travel (conferences, professional development)</i>	\$1,000
<i>Resources (training materials, supplies)</i>	\$4,000
Other	\$
<i>Capstone Project</i>	\$20,000.00
Total Expenses	\$

Funding

Internal Reallocation	NA
Appropriation	NA
Special Legislative Appropriation	NA
Grants and Contracts	NA
Special Fees	NA
Total Funding	NA

Student Program Cost

Postsecondary Tuition	\$
Postsecondary Fees	\$
Differential Tuition	\$
Secondary Fees and any additional costs	\$
Estimated cost of required materials	\$
Additional costs	\$

Revenue Generation

Projected Revenue	NA
-------------------	----

Description: [If applicable, describe potential revenue sources from services or products offered.]

Part 3: Required Documentation

- Graduation Requirements
Complete 14 credits of foundational coursework and 6 credits of supplemental coursework.
- Program Description and Objectives
The Control Systems and Robotics program prepares qualified students for advanced work as control system technicians in an automated manufacturing environment. This certificate provides hands-on training in Programmable Logic Controllers (PLCs), industrial robots, industrial networking, servo system programming, vision systems, and Human Machine Interface (HMI) programming. Students work with teaching staff of industry professionals who emphasize hands-on instruction and provide competency-based training based on industry input for best practices and technological relevance. There is a high demand for employees with these specialized skills.
 - Build an operational industrial network containing computers and control devices.
 - Program a process using a common PLC.
 - Design and program an HMI screen to interface with a PLC and control a process.
 - Program a servo-driven process with a PLC.
 - Identify, locate, communicate with other devices, and inspect two different parts using machine vision.
 - Build a project that integrates multiple control topics.
- Course Descriptions and Objectives
 - See USHE-aligned program information
- Occupational Advisory Committee Minutes
 - See attached OAC minutes and EVFs.

Submission

Submit the completed form and required documentation to the Office of the Commissioner of Higher Education (OCHE). OCHE will coordinate a peer review at an upcoming Chief Instructional Officer or Curriculum meeting, conduct a review for policy compliance, and return these written materials for you to include with your Trustee program approval request.

Next Steps

1. Submit the Board of Trustees approval to OCHE.
2. OCHE will place the approval on the agenda of the Board of Higher Education.
3. Submit all approvals and the policy to COE for final approval.
4. Once approved, provide accreditation documentation to confirm the new program's implementation.